

AMENDMENTS TO THE CLAIMS

Claim 1. (Previously Presented)

A semiconductor device comprising:

a semiconductor substrate having a front surface and rear surface, a photoelectric converting portion being formed on the front surface;

a light-shading means for shading an incoming light from the rear surface of the semiconductor substrate to said photoelectric converting portion, wherein

said light-shading means is formed at an area corresponding to at least the photoelectric converting portion, said area being on the rear surface of the semiconductor substrate.

Claim 2. (Currently Amended)

A semiconductor device according to claim 1, ~~wherein said package comprises~~ further comprising a wiring board with a connecting terminal formed on the rear surface.

Claim 3. (Original)

A semiconductor device according to claim 1 or 2, wherein said light shading means is rough surface area.

Claim 4. (Withdrawn)

A semiconductor device according to claim 1 or 2, wherein said light shading means is a multi-layer film composed of films with different refraction indices formed on the area corresponding to the photoelectric converting portion on the rear surface of said semiconductor

substrate.

Claim 5. (Withdrawn)

A semiconductor device according to claim 1 or 2, wherein said light shading means is a light-shading film formed on the rear surface of said semiconductor substrate.

Claim 6. (Withdrawn)

A semiconductor device according to claim 1 or 2, wherein said wiring board is connected to said semiconductor substrate through a light-shading resin material.

Claim 7. (Withdrawn)

A semiconductor device according to claim 1 or 2, wherein a surface of said wiring board is rough surface.

Claim 8. (Withdrawn)

A semiconductor device according to claims 1 or 2, wherein said wiring board includes a light shading layer in the interior or on the rear surface of the semiconductor substrate.

Claim 9. (Withdrawn)

A method for manufacturing a semiconductor device comprising the steps of:

a forming step for forming a plurality of semiconductor devices on the front surface of a semiconductor substrate;

a bonding step for bonding a wiring board on the rear surface of said semiconductor substrate;

a separating step for separating a bonding structure, obtained by bonding, into semiconductor devices; and

a grinding step for forming a rough surface on the rear surface of the semiconductor substrate to reflect light away from the rear surface.

Claim 10. (Withdrawn)

A method for manufacturing a semiconductor device comprising the steps of:

a forming step for forming a plurality of semiconductor devices on the front surface of a semiconductor substrate;

a bonding step for bonding a wiring board on the rear surface of said semiconductor substrate using light-shading adhesive provided between the wiring board and the semiconductor substrate and the light-shading adhesive suppressing light reflected from the rear surface of the semiconductor substrate from reaching the semiconductor device; and

a separating step for separating a bonding structure obtained by bonding, into said semiconductor devices.

Claim 11. (New)

A semiconductor device according to claim 1, wherein the light-shading means shades the incoming light which is reflected from the rear surface of the semiconductor substrate.

Claim 12. (New)

A semiconductor device according to claim 2, wherein the light-shading means shades the incoming light which is reflected from the rear surface of the semiconductor substrate.

Claim 13. (New)

A semiconductor device according to claim 3, wherein the light-shading means shades the incoming light which is reflected from the rear surface of the semiconductor substrate